



CONVEYOR & CHAIN CHECKLIST

CHAIN

1. **Elongation Due To Joint Wear** – Chain is worn out when it has grown 5%.
(Or 120" \approx 126")
2. **Stiff Joints** – Drag chain barrels get packed with debris which leads to torsional failure of the rivets.
3. **Sidebar Wear** – Sliding in trough. Is the wear getting to the barrel weld?
4. **Sidebar Wear** – Inside of links worn from sides of sprocket tooth indicating misalignment, etc.
5. **Sidebar Wear** – Check drag chain sidebar on the bottom side to see if they are worn (or bent) from contacting drum flanges.
6. **Barrel Wear** – Barrels should be polished where the sprocket tooth touches, not worn or gouged. This could indicate sprocket problems – hooked teeth, etc.
7. **Attachment Wear** – Has normal wear gotten to the welds or are they gouged from hanging up in the conveyor?
8. **Rivet Wear** – Are the heads or tails of rivets worn from rubbing sides of trough indicating an alignment problem or chain wear?
9. **Roller Wear** – I.D.'s of rollers are worn if there is a lot of slop and wobble.

SPROCKETS

1. **Hooked Teeth** – Worn teeth will over stress chain and cause the chain to snap in and out of sprocket and possibly hang up when exiting.
2. **Build-Up In Pockets** – Material packed in the pockets will cause the chain to stretch because it can't get to its normal Pitch Diameter.
3. **Grooved Drum Flanges** – Flanges are too big and will stretch chain, same as above.
4. **Teeth Scrubbed On Sides** – Indicates misalignment of sprockets or shafts. Chain could also be worn to the point it won't track properly.
5. **Chain Rides High On Teeth** – Chain is elongating and close to needing replaced.



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SPROCKETS – Continued

6. **Chain Bow String Tight** – Indicates material packed in pockets or flanges too large.
7. **Noise** – Chain should make a clicking sound (metal on metal) as it engages the sprocket. If it is snapping or popping, check out 1 through 6 above.

TRACKS & TROUGHS

1. **Wear Plates** – They should be shining and smooth. Look for grooves which will accelerate the wear on the sidebars and barrel welds.
2. **Side Wear** – Look for wear on the sides indicating conveyor is out of line or chain is worn and snaking.
3. **Track Wear @ Ends** – Is the track worn more at the terminals which indicates the sprockets are set too low to allow for chain walk? This over stresses the chain.
4. **Obstructions** – Are there any liner plates or joints loose our out of line which will catch the chain as it goes by?

GENERAL

1. Try to inspect the conveyor both running and stationary. Listen for funny or unusual noises. It is a lot like your car. You know when something doesn't sound right.
2. While running look for chain snaking, snapping at the sprockets or hanging up anywhere.
3. Make sure the catenary take-up falls into the 5% to 10% of the centers range. Mechanical take-ups should be tight enough to get the chain to operate smoothly, no tighter. Overly tight take-ups accelerate chain and sprocket wear.



PREVENTIVE MAINTENANCE CHECKLIST

Location _____

Conveyor No. _____

Chain _____ Quantity _____

Attachment _____ Spacing _____

Date _____ Inspector _____

Chain Measurements Required	Dimension	Condition
1. Elongation		
2. Joint Condition		
3. Sidebar Wear		
4. Barrel Wear		
5. Attachment Wear		
6. Rivet Wear		
7. Roller Wear		

Sprocket Measurements Required	Visual Inspection
1. Tooth Condition	
a. Hooked Tooth	
b. Build-Up On Tooth	
2. Grooved Drum Flanges	
3. Scrubbed Tooth	
4. Chain To Tooth Location	
5. Chain Tension	
6. Abnormal Noise	
7. Chain Walk or Surging (See Direction Of Travel Section)	

Tracks & Troughs	Visual Inspection
1. Wear Plate Condition	
2. Side Wear	
3. Barrel Wear (Pattern)	
4. Track Wear @ Ends	
5. Obstruction	